

## Tips for Sustainable Rehabilitation Projects

1. **INSULATE** unfinished areas first, such as attics and basements, where less historic fabric will be altered.
2. **CONDUCT** an energy audit – using blower tests and infrared thermographics – to diagnose existing insulation and air infiltration conditions and come up with weatherization strategies.
3. **CONSULT** with qualified preservation consultants about renewable energy sources such as solar photovoltaic (PV) and hot water systems, ground source heat pumps, and wind turbines. Research possible rebates for renewable energy sources.
4. **EVALUATE** existing heating, ventilating, and air conditioning (HVAC) systems to ensure they are functioning properly. Conduct proper maintenance for best performance; replace with higher efficiency units if necessary.
5. **EVALUATE** existing light conditions and consult a lighting contractor if needed. Install occupancy sensors and dimmer switches. Look for ways to improve natural daylighting.
6. **REPAIR** and **MAINTAIN** historic windows, light monitors, and skylights, where feasible. Add new skylights only on secondary facades or screened surfaces to bring in more natural light without loss of historic integrity.
7. **INSTALL** low-flow plumbing fixtures and aerators in existing fixtures to reduce water consumption by up to 40 percent. Use rain barrels at downspouts to capture rainwater for landscape use.

*\*taken from Sustainability and Historic Preservation Executive Summary 2011, prepared by Washington State Department of Archaeology & Historic Preservation. [www.dahp.wa.gov](http://www.dahp.wa.gov)*

## Guiding Principles

1. **DO NO HARM:**  
Respect the historic features of a building and think before replacing with newer options. Sometimes historic features and materials are simpler, more long-lasting and durable. Additionally, they are important as architectural features and for their workmanship.
2. **REPAIR, RESTORE, AND MAINTAIN – NOT REPLACE – HISTORIC COMPONENTS:**  
Prior to retrofitting historic buildings to make them more energy efficient, the first step should always be to identify and evaluate existing historic features to assess their inherent energy-conserving potential. Features such as cupolas, shutters, transoms, and skylights play an energy-saving role. Operable historic windows improve indoor air quality and their energy performance can be enhanced by using storm windows, caulk, and weatherstripping. Weatherizing should be undertaken carefully to preserve a building's historic character. Select products and treatments that are reversible and do not require major structural or material changes.
3. **REINVEST IN OUR OLDER AND HISTORIC COMMUNITIES:**  
These communities tend to be centrally located, dense, walkable, and are often mass-transit oriented. Reinvestment in existing communities also preserves the energy embedded in infrastructure, such as roads, water, and sewer lines.



*This late Victorian/Queen Anne style home was built by William A. Hannan in 1893. Hannan's wife was the granddaughter of David C. Bothell, the town's namesake. Sometime prior to 1908, the small porch, with its decorative wood post trim along the top, was expanded across the front of the building. In 1978, the entire structure was moved to the Park at Bothell Landing and is occupied by the Bothell Historical Society.*

*The house in its restored state is shown on the front of this brochure. It is now owned by the City of Bothell and is listed on the Local and State Registers of Historic Sites. ▶*

## HISTORIC PRESERVATION & SUSTAINABILITY

### For More Information

Please visit the City of Bothell website or contact the city's Planning Department for additional information

Community Development Department  
9654 NE 182nd Street, Bothell, WA 98011  
(425) 486-8152

[commplanning@ci.bothell.wa.us](mailto:commplanning@ci.bothell.wa.us)

[www.ci.bothell.wa.us/Residents/  
HistoricPreservationAndLandmarks.ashx?p=1340](http://www.ci.bothell.wa.us/Residents/HistoricPreservationAndLandmarks.ashx?p=1340)

**This brochure was produced by the  
BOTHELL LANDMARK  
PRESERVATION BOARD**

*We are a seven-member board responsible for identifying and encouraging the conservation of the city's historic resources, maintaining a local register of historic landmarks, overseeing changes to properties on the register, raising awareness of the city's historic resources, and serving as the city's primary resource in related matters.*

*“Old ideas use new buildings;  
new ideas use old buildings.”*

JANE JACOBS

*The W.A. Hannan home, built in 1893.  
Relocated, renovated, and currently home to the  
Bothell Historical Museum in the Park at Bothell Landing.*

## Historic Preservation and Sustainability

We are accustomed to recycling aluminum cans, glass, and newspapers, but don't apply this same common sense to our built environment. Historic buildings, by their nature, are sustainable. The continued use of our existing buildings reduces the amount of demolition and construction waste going to our landfills, lessens unnecessary demand for energy and other natural resources, and conserves embodied energy.

Preservationists often have to fight a public perception that old buildings are inefficient and require expensive measures to bring them up to code and make them energy efficient. Historic buildings have many inherent energy-saving features and were designed to take advantage of natural ventilation, daylight, and solar orientation. They were often built using materials that were locally sourced, more durable, needed less processing, and are easier to maintain. When upgraded with new technologies, historic buildings can maximize energy performance.

In addition to energy savings, historic preservation provides environmental, cultural, and economic benefits for communities—by keeping jobs local and creating a sense of place.

## Financial Incentives

The federal government offers a 20% investment tax credit for the rehabilitation of certified historic buildings. These projects must meet the Secretary of the Interior's Standards for Rehabilitation, which provide guidance for appropriate rehabilitation of historic buildings while allowing for updates and modern amenities.

Owners of historic structures can participate in the county tax valuation program, which allows qualifying owners to receive a potential property tax reduction and use the savings to help rehabilitate, restore, and maintain their buildings.

## A Case Study in Sustainable Preservation

### The Chase House



*Reuben Chase was a Civil War veteran who settled in the Bothell/ area in 1889 and became Bothell's first physician. He is credited with stopping a local typhoid epidemic. House calls, with medicine, were said to have cost as little as \$1.50, and Dr. Chase sometimes accepted meat or produce in lieu of cash. The Chase family built the home shown here in about 1895. The house also served as an office and the first hospital in the community.*

*The property is now part of the University of Washington Bothell campus and the Chase house has been renovated to serve as a place for meetings and administrative functions.*



*As population increases in Bothell and adjacent communities, rapid development is transforming the rural landscape. Between 1998 and 2002, 140 buildings were recorded to have been destroyed to make room for new construction. The re-purposing of the Chase House is an example of preservation working against a strong trend toward demolition. Not only did it save resources and energy, but it also saved a valuable piece of Bothell's history.*

## By the Numbers

Construction, operation, and demolition of buildings consume a lot of our resources:

- » Accounts for 43 percent of carbon emissions and 39 percent of total U.S. energy consumption
- » Comprises 2/3 of all non-industrial waste in the U.S.
- » Yields 155 pounds per square foot of waste for average building demolition

In Washington State, buildings account for:

- » 514,366 billion BTUs of energy consumption annually
- » 89.5 billion tons of carbon dioxide emissions annually
- » 694 million gallons of water per day

Preserving historic buildings conserves energy and resources:

- » A 50,000 square foot building contains roughly 80 billion BTUs of "embodied energy," or the total expenditure of energy used in the process of building, from raw material extraction to final installation – the equivalent of about 640,000 gallons of gasoline!
- » Commercial buildings built before 1920 use less energy per square foot than their modern counterparts.

## Recycling of Bothell's Past . . .

Historic preservation and sustainability go hand in hand. In fact, our existing buildings are some of our greatest renewable resources.

*“The greenest building is the one that is already built.”*



◀ *The one-story brick and concrete Gerard Ericksen building was constructed in 1926. It has served as Carlton Ericksen's Grocery Store and Huntley Dry Goods, Hamilton's Thriftway, Dorr's Thriftway, and now the Bothell Furniture Store.*



◀ *Besides embodying history, older architecture often contains unique craftsmanship. This Italianate style building was constructed to provide a meeting place for the Knights of Pythias. The organization's symbol was displayed prominently on the pediment and repeated in the brickwork. Mohn Furniture was at ground level. Today Mills Music occupies the entire building.*



conservation of resources + protection of history = preservation & sustainability